MISSOURI BOTANICAL GARDEN

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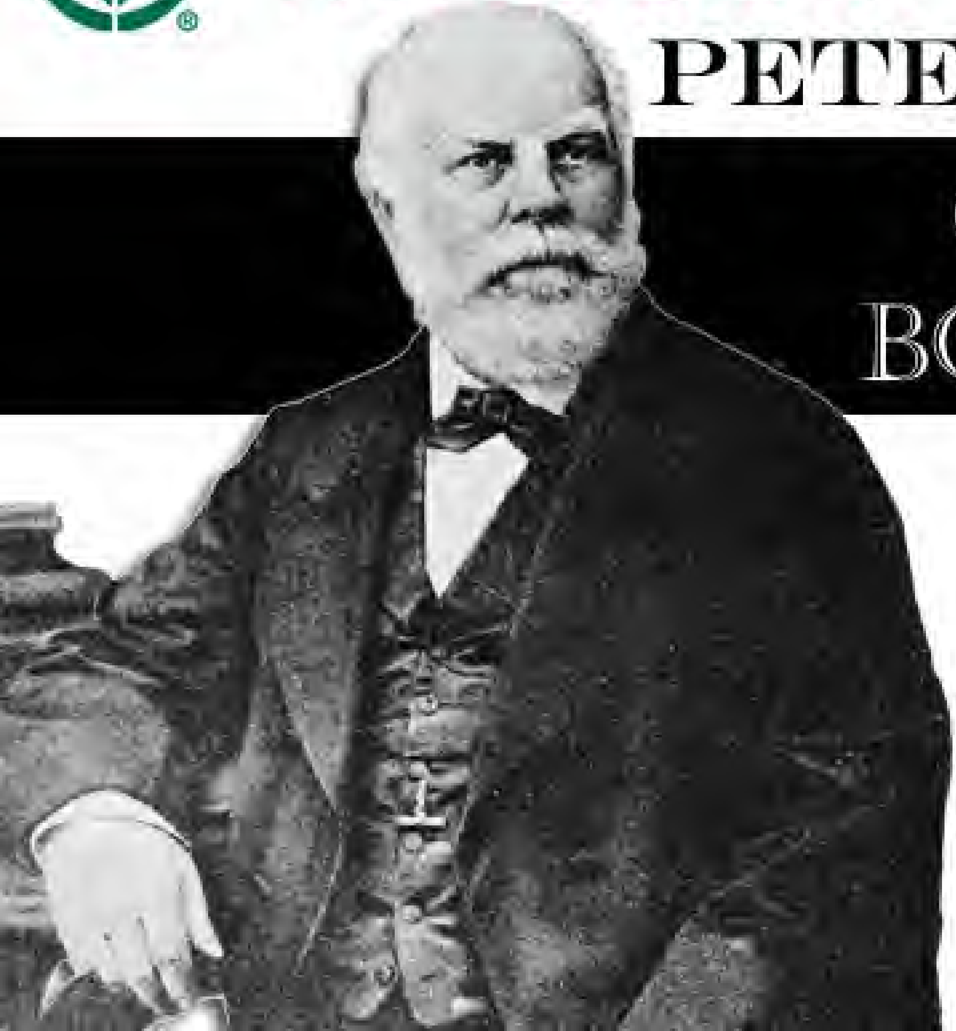

GEORGE ENGELMANN BOTANICAL NOTEBOOKS

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P. inops

1380-5

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P. clausa

	Pinus inops	Pinus clausa
4 Folia	bina	bina
	latiora (1.5–2 mm wide breviora 1–2½")	angustiora (1 mm wide) longiora (3–4½")
	grossius serrulata	tenuissime serrulata
3 Vaginae	8–12-phyllae laxae breves (3'''	8–12 phyllae laxae breves 3'''
	demum totae deciduae	demum totae deciduae
1 rami juniores	rubello-glauci	virides
2 ~~Bracteae~~	~~vagina~~ bracteae breviores	vagina breviores
5 ~~amenta~~ flores masculi	crassiora longior	breviora graciliora
involucri	~~sub~~ 8–9 squamata	~~sub 8–~~ 10–11 squamata
Anthera		
pollen	0,060 – 0.072 mm	0.060 – 0.075 mm
6. amenta foeminea	lateralia pedunculata	lateralia pedunculata
	pedunculo erecto patulo	mox recurvo
	squamae longe cuspidato-aristatae	cuspidato-aristatae
7. Strobili	2–2½ poll minores, plus minus pedunculati. persistentes	2½–3 poll majores sessiles persistentes deorsum versi (reflexi)
	~~erecto-patentes~~ – ad maturitatem aperti	saepe per annos clausi
squamae	mucrone ~~robusto~~ gracilior acutissimo patentes. recurvo armatae	mucrone robustiore recto patentes. antice verso armatae
semina subtus	~~obscure~~ asperata nec costata	obscure 3 costata
	ala angusta, medio latissima	angusta medio latissima
Cotyledones	5–6	4 (–5)
annual growth		4–5 lines (ring 2–2½ lines wide)

Trunk

bark

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Pinus inops

Mich. Flor. II. 204. amentis masc. ovato-oblongis rufidulis

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UGGISTS
TREETS,
O.

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Th. Meehan writes May 30 1875:

P. inops: I believe the mature cones appear sessile; they are "pendant" [recurved] except when there are several in a whorl when some will be upright

Phil 1868 p 301

See my paper on varieties of P. inops & Banksiana in Proc. Acad

The spines on the cone scales vary in length but are, I believe, always recurved

The tree is spreading, and when mature [full grown] flat topped

Variations chiefly in the form of the cones

~~Var~~.

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A H Curtiss, Titusville, Florida, Febr 28 1881 writes to Prof Sargent.

Pinus clausa abounds on the Florida East coast, though occupying but a narrow belt, a light sandy ridge not over a mile wide extending parallel with the coast and lying a little west of the lagoons. It commences about half way between St Augustine and the mouth of the St Johns River and attains its greatest developement at the head of Halifax River, where many trees measure 70-80' alt. and 24-26 in. diam. On the Peninsula between the lagoons and the ocean it is quite small, but abundant.

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Acc of -- the Gr[illegible] for Cot, No -- for the quarter ending Jan 1st

[7—155.]

TENTH CENSUS
OF THE
UNITED STATES.

Tree Covering; Forest Wealth;
the Lumbering Industry.

CHAS. S. SARGENT,
Expert and Special Agt.

Department of the Interior,

CENSUS OFFICE,

Brookline, Mass., March 7, 1881.

Dr George Engelmann
St Louis Mo

Dear Sir

I enclose for your information a letter just received from Mr Curtiss.
Please return the same

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Recd May 17/75

Inops that pedunculed con

P. serotina

Apalachicola. 10th May 1875.

My dear Doctor:

Turning to p. 433 of my Flora, under P. P. inops & mitis you will find the expression "opening at maturity". Of course they do; but in my Ms., I had another species (P. clausa) in which they did'nt open at maturity, & fearing lest it should be found to be a variety of P. inops, I erased it when in the printers' hands, but neglected to erase the above expression in the other two. That's how it came. Now I won't swear positively to any Pine, unless it be P. Strobus; not even to P. Australis, for they hybridise awfully, & Taeda butts against it awfully. Now the habit of this Pine is just that of P. inops; but the leaves are longer & more slender, & that is the only difference that I can see. But the cones of this remain closed for years, generally, but not always, for, perhaps, one in ten or twenty of the trees present cones of the normal character.

I send off with this by mail a little box containing all parts of the tree, which will enable you to satisfy yourself about its claim to rank as a species. It is a tree commonly about twenty or thirty feet high, with a rounded top or outline; with a rough scaly bark on the lower part of the trunk, the upper part & branches being smooth. Its base is rarely more than one foot in diameter. I have seen it, with cones, not more than four feet high, & sometimes it runs up slender like a Larch to forty feet. Its grain is very coarse, — has no lightwood, & decays rapidly. I have never seen it applied to any use. It grows only on the most barren sandy ridges near the coast, where are found the Ceratiola & a few starved Oak bushes, & where the sands are covered with several forms of Lichens. The scales of the cones grow together near their summits, which confines the seeds, & these cones remain firmly attached to, or embedded in, the branches or in the main stem for at least ten years, sometimes, & probably much longer, and in these closed cones will be found seeds apparently as perfect as the in the year of their formation. These ~~cones~~ are single, opposite, or verticillate, and grow at the end of the first joint of the year, of which joints there seem to be three annually.

Elliott does not appear to have seen this tree, or I might suspect it to be your P. Elliottii. In the box will be found branchlets containing young cones, & leaves of one to three years growth, the ordinary cones of various ages & sizes, and one normal one with the sees shed. On this tree all were like this one. There is another one partially open, from a separate tree.

I also enclose two little Euphorbias which I found on Lookout Mt. Tennessee three years ago, & which I take to be Michaux's long lost E. mercurali As it comes from near his locality. The full grown leaves are oval.

Well I have had an unexpected, but very pleasant visit from Dr Gray & Lady, both of whom seemed to be delighted with our splendid climate, & express an intention to visit us again,

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or even annually. I showed him all my botanical novelties, some of which he sent on before him to his gardener.

Yes. I received both of your papers on Yucca, and read them with much interest & pleasure. I never saw the Y. gloriosa growing wild, & do not know certainly if it is found on our coast. Y. aloifolia is common. I am glad you have seen the means of settling the fructification of these plants.

Nor have I forgotten your wish to get Zostera but our fishermen have never been able to get it, although I directed them to the locality where years ago I saw it. I presume our terrible gales have carried it away, or buried it deep under the drifting sands, as they have that Podostemonaceous thing. The agricultural Dep't at Washington wants me to get for them blocks of trees of South Florida & I have concluded to go down there if they will pay my way. I will give that Terra incognita a thorough scouring, if I go, Entomologically & Botanically – Always glad to hear from you, & remain, Yours very cordially,

A W Chapman

Missouri Botanical Garden
George Engelmann Papers

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Rec^d July 12^t 1875

Pinus inops? clausa

Lycop cernuum
Pinus cortex

Apalachicola July 1st 1875

My dear doctor.

Yours of the 24th May has been on hand some time, and to day, I am offered an opportunity, by Capt. Niles of the Coast survey to mail this & the package of pine in Pensacola, — our mail having ceased to come through negligence of the new Contractor. Better give it up & call it a form of inops — Well I send three pieces of bark one near the ground of the largest tree I saw — very coarse — & two others one near the ground & the other just above the half of its height of the same tree (the smooth piece) I send one cone apparently of last year & a twig bearing three young ones at different points on the twig.

At this season the branchlets are all ash-gray, except a growing point on the twig

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sent which is pale green,

I notice on nearly all the trees the cones mostly closed, but here & there on these trees a cone is fully or partly open - ie with some of the basal scales on one side loose & spreading, very rarely all are open on a tree. I doubt if this pine survives many years, perhaps not more than 30 or 40 years for a trunk more than a foot in diameter is seldom met with, & the grain is very coarse.

I believe it is only found along this Coast of Florida in dry sandy places. Dr Feay says it is not found at Savannah, nor did he ever see it any where else except at this place.

I believe I have answered all your questions & turn the thing over to your decision which will be perfectly right while I run up to hand this to Capt Niles, in the mean time remaining

Yours truly A.W. Chapman